

Table 8. Installed Cost and Efficiency Ratings of Selected Equipment

Equipment Type	Relative Performance ¹	2002 Installed Cost (\$2001) ²	Efficiency ³	2015 Installed Cost (\$2001) ²	Efficiency ³	Approximate Hurdle Rate
Electric Heat Pump	Minimum	\$2,930	10.0	\$3,500	12.0	15%
	Best	\$5,600	18.0	\$5,600	18.0	
Natural Gas Furnace	Minimum	\$1,300	0.80	\$1,300	0.80	15%
	Best	\$2,100	0.97	\$2,000	0.97	
Room Air Conditioner	Minimum	\$540	9.7	\$540	9.7	140%
	Best	\$760	11.5	\$760	12.0	
Central Air Conditioner	Minimum	\$2,080	10.0	\$2,300	12.0	15%
	Best	\$3,500	18.0	\$3,500	18.0	
Refrigerator (18 cubic ft)	Minimum	\$900	478	\$600	478	19%
	Best	\$650	460	\$950	400	
Electric Water Heater	Minimum	\$337	0.86	\$500	0.90	83%
	Best	\$1,200	2.60	\$1,100	2.6	
Solar Water Heater	N/A	\$3,200	2.0	\$2,533	2.0	83%

¹Minimum performance refers to the lowest efficiency equipment available. Best refers to the highest efficiency equipment available.

²Installed costs are given in 2001 dollars in the original source document.

³Efficiency measurements vary by equipment type. Electric heat pumps and central air conditioners are rated for cooling performance using the Seasonal Energy Efficiency Ratio (SEER); natural gas furnaces are based on Annual Fuel Utilization Efficiency; room air conditioners are based on Energy Efficiency Ratio (EER); refrigerators are based on kilowatt-hours per year; and water heaters are based on Energy Factor (delivered Btu divided by input Btu).

Source: Arthur D. Little, *EIA Technology Forecast Updates*, Reference Number 8675309, October 2001.